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Title:

TW0436383B: THE END-POINT DETECTION METHOD OF CMP POL USING THE PRINCIPLE OF OPTICAL CONFOCAL FEEDBACK

Country: **TW** Taiwan
Kind: **B** Patent

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IPC Code: **B24B 7/24;** B24B 37/04; H01L 21/304;

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Abstract:

This invention relates to a end-point detection method of CMP polishing using the principle of optical confocal feedback, wherein the optical feedback method is used to replace the conventional interference method, and can accurately detect the end-point of CMP polishing. The aforementioned method comprises the following steps: (i) fixing the distance between the polishing pad and the lens of the optical confocal feedback system; (ii) if the end-point of polishing is located at the position of the first distance which is the distance from the metal layer in the wafer to the surface of the wafer, making the distance from aforementioned polishing pad to the lens of the optical confocal feedback system to be the length of the focal length of aforementioned lens subtracting the length of the aforementioned first distance; and (iii) proceeding the CMP polishing until the optical confocal feedback system detects the reflection light intensity to be maximum. However, if the distance between polishing pad and the lens of the optical confocal feedback system cannot be fixed, another set of the optical confocal feedback system can be used to determine the distance between the polishing pad and the lens of the optical confocal feedback system, and similar methods can be used to detect the end-point of CMP polishing.

Family:

Other Abstract Info:

Buy PDF	Publication	Pub. Date	Filed	Title
	TW0436383B	May 28, 2001	March 16, 2000	THE END-POINT DETECTION METH POLISHING USING THE PRINCIPLE CONFOCAL FEEDBACK

1 family members shown above

None